Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1. (Currently Amended) ~~Isolated~~ An isolated polypeptide ~~called ICBP90 (inverted CCAAT box binding protein 90) with~~ comprising amino acid sequence SEQ ID NO. 2.

2. (Currently Amended) ~~Isolated~~ An isolated polypeptide ~~characterized in that it comprises~~ comprising a polypeptide chosen from:

a) a polypeptide with sequence SEQ ID No. 2, SEQ ID No. 4, SEQ ID No. 6 or SEQ ID No. 8;

b) a polypeptide variant of polypeptide with sequences of amino acids defined in a);

c) a polypeptide homologous with the polypeptide defined in a) or b) and including at least 80% homology~~, preferably 90%~~ with said polypeptide of a);

d) a fragment of at least 5 consecutive amino acids of a polypeptide defined in a), b) or c);

e) a biologically active fragment of a polypeptide defined in a), b) or c).

3. (Currently Amended) ~~Polypeptide~~ A polypeptide according to ~~any one of Claims 1 to 2~~ Claim 1, ~~and characterized in that it~~ which comprises [[of]] at least one domain for fixation to [[the]] a DNA selected [[in]] from the group ~~composed~~ consisting of a "zinc-finger" domain and a "leucine-zipper" domain.

4. (Currently Amended) ~~Polypeptide~~ A polypeptide according to Claim 3 characterized in that the DNA sequence on which said polypeptide is bound is a CCAAT box~~, preferably an inverted CCAAT box (Inverted CCAAT box: ICB)~~.

5. (Currently Amended) ~~Isolated~~ An isolated polynucleotide ~~characterized in that it codes for~~ which encodes a polypeptide according to Claim 1.

6. (Currently Amended) ~~Polynucleotide~~ A polynucleotide according to Claim 5 with sequence SEQ ID No. 1.

7. (Currently Amended) ~~Isolated~~ An isolated polynucleotide ~~characterized in that it consists of a polynucleotide~~ chosen from:

a) a polynucleotide with sequence SEQ ID No. 1, SEQ ID No. 3, SEQ ID No. 5 or SEQ ID No. 7 or in which the sequence is that of the RNA corresponding to the sequence SEQ No. 1, SEQ ID No. 3, SEQ ID No. 5 or SEQ ID No. 7;

b) a polynucleotide in which the sequence is complementary to the sequence of a polynucleotide defined in a),

c) a polynucleotide ~~in which the sequence consists of~~ with at least 80% homology with a polynucleotide defined in a) or b),

d) a polynucleotide hybridizing under ~~very~~ stringent conditions with a polynucleotide sequence defined in a), b) or c),

e) a fragment of at least 15 consecutive nucleotides~~, preferably 21 consecutive nucleotides, and preferably 30 consecutive nucleotides~~ of a nucleotide defined in a), b), c) or d) with the exception of human EST AI 084 125, with the exception of the sequence corresponding to the sequence SEQ ID No. 944 published August 5, 1999 in the patent application WO 99 38972 and with the exception of the sequences SEQ ID No. 9, No. 10, No. 11 corresponding, respectively, to the human EST No. AI 083 773, AA 811 055, No. AA 488 755, No. AA 129 794 and No. AA 354 253.

8. (Currently Amended) ~~Polynucleotide~~ A polynucleotide according to Claim 7 ~~characterized in that it~~ which is ~~labelled~~ labeled directly or indirectly with a radioactive compound or a nonradioactive compound.

9. (Currently Amended) ~~Use~~ A method for amplifying or polymerizing nucleic acid sequences, comprising use of a polynucleotide according to Claim 8 as a primer ~~for amplification or polymerization of nucleic sequences~~.

10. (Currently Amended) ~~Use~~ A method for detecting nucleic acid sequences, comprising use of a polynucleotide according to Claim 8 as a probe ~~for detection of nucleic sequences~~.

11. (Currently Amended) ~~Use~~ A method for controlling expression of a corresponding protein product, comprising use of a polynucleotide according to Claim 8 as a sense or antisense oligonucleotide to control ~~the~~ expression of the corresponding protein product.

12. (Currently Amended) ~~Recombinant~~ A recombinant cloning vector [[of]] comprising a polynucleotide ~~according to one of Claims 5 to 8 and/or~~, expression of which produces a polypeptide according to Claim 2 ~~one of Claims 1 to 4 characterized in that it contains a polynucleotide according to any one of Claims 5 to 8~~.

13. (Currently Amended) ~~Vector~~ A recombinant cloning vector according to Claim 12 ~~characterized in that it consists of~~ comprising the parts enabling the expression ~~[and] possibly the secretion~~ of said polypeptide in a host cell.

14. (Currently Amended) ~~Vector according to any one of Claims 12 to 13~~ A recombinant cloning vector according to claim 12, ~~characterized in that~~ wherein the parts enabling the expression of said polypeptide are chosen [[form]] from the group consisting of:

a) [[the]] an isolated polynucleotide with sequence SEQ ID No. 12;

b) a polynucleotide ~~in which the~~ having a sequence [[is]] complementary to the polynucleotide sequence defined in a);

c) a polynucleotide ~~in which the~~ having a sequence ~~consists of~~ with at least 80% identity with a polynucleotide defined in a) or in b);

d) a polynucleotide hybridizing under ~~very~~ stringent conditions with a sequence of the polynucleotide defined in a), b) or c).

15. (Currently Amended) ~~Host~~ A host cell~~, characterized in that it is~~ transformed by a vector according to ~~one of Claims 12, 13 and 14~~ Claim 12.

16. (Currently Amended) ~~Method for preparation of~~ A method for preparing a recombinant polypeptide, comprising culturing a host cell ~~characterized in that a host cell is cultured~~ according to Claim 15 under conditions enabling the expression ~~and possibly the secretion~~ of said recombinant polypeptide, wherein ~~and that~~ said recombinant polypeptide is recovered.

17. (Currently Amended) ~~Recombinant~~ A recombinant polypeptide obtainable by a method according to Claim 16.

18. (Currently Amended) ~~Monoclonal~~ A monoclonal or polyclonal antibody and its fragments ~~characterized in that it~~ which specifically binds a polypeptide according to ~~one of Claims 1 to 4 and 17~~ Claim 2.

19. (Currently Amended) ~~Monoclonal~~ A monoclonal antibody according to Claim 18, wherein said antibody is specific for the human ICBP90 protein and is capable of inhibiting the interaction between ICBP90 and the DNA sequence on which the protein ICBP90 is specifically bound.

20. (Currently Amended) ~~Monoclonal~~ A monoclonal antibody according to Claim 18, wherein said antibody is specific for the human ICBP90 protein and is capable of inhibiting the interaction between ICBP90 and proteins with which ICBP90 interacts, said proteins preferably being ICBP90 itself or proteins of a transcriptional complex.

21. (Currently Amended) ~~Method for detection~~ A method for detecting and/or measuring [[of]] a polypeptide according to ~~one of Claims 1 to 4 and 17~~ Claim 2 in a biological sample, ~~characterized in that it comprises the following steps~~ comprising:

a) [[putting]] contacting the biological sample ~~in contact~~ with ~~an antibody according to one of Claims 18 to 20~~ a monoclonal or polyclonal antibody and its fragments, which specifically binds a polypeptide according to Claim 2;

b) and revealing a formed antigen-antibody complex.

22. (Currently Amended) ~~Kit~~ A kit for ~~making use of a~~ performing the method according to Claim 21 in a biological sample by immunological reaction, ~~characterized in that it comprises the following parts~~ comprising:

a) ~~a monoclonal or polyclonal antibody according to one of Claims 18 to 20~~ the antibody of Claim 21;

b) if applicable, [[the]] medium reagents for [[the]] formation of ~~the favourable~~ favorable medium for the immunological reaction; and

c) [[the]] detection reagents enabling [[the]] detection of the antigen-antibody complex produced by the immunological reaction.

23. (Currently Amended) ~~Method~~ A method for ~~detection and/or measurement of~~ detecting and/or measuring a polynucleotide according to ~~any one of Claims 5 to 8~~ Claim 7 in a biological sample, ~~characterized in that it consists of~~ comprising the following steps:

a) isolating [[the]] DNA from the biological sample to be analyzed, or obtaining cDNA from [[the]] RNA of the biological sample;

b) specific amplification of the DNA with the aid of one or more nucleic acid primers, wherein said primer is a polynucleotide according to Claim 7 which is labeled directly or indirectly with a radioactive compound or a nonradioactive compound ~~primers according to Claim 9~~; and

c) ~~analysis of amplification products~~ analyzing products resulting from the specific amplification.

24. (Currently Amended) ~~Kit~~ A kit for ~~making use of a method according to Claim 23~~ detecting and/or measuring a polynucleotide according to Claim 7 in a biological sample ~~characterized in that it comprises the following parts~~ ,comprising:

a) a pair of nucleic acid primers ~~according to Claim 9~~, wherein said primer is a polynucleotide according to Claim 7 which is labeled directly or indirectly with a radioactive compound or a nonradioactive compound;

b) ~~reagents necessary for carrying out an amplification reaction of DNA~~ reagents for producing an amplified DNA fragment; and

c) possibly a component enabling [[the]] verification of the amplified DNA fragment sequence ~~of the amplified fragment~~, more particularly a probe ~~according to Claim 10~~, wherein said probe is a polynucleotide according to Claim 7 which is labeled directly or indirectly with a radioactive compound or a nonradioactive compound.

25. (Currently Amended) ~~Method~~ A method for ~~detection~~ detecting and/or ~~measurement of~~ measuring a nucleotide according to ~~any one of Claims 5 to 8~~ Claim 7 in a biological sample ~~characterized in that it consists of the following steps~~, comprising:

a) ~~putting~~ contacting a probe ~~according to Claim 10 in contact~~ with a biological sample, wherein said probe is a polynucleotide according to Claim 7 which is labeled directly or indirectly with a radioactive compound or a nonradioactive compound; and

b) ~~detection and/or measurement~~ detecting and/or measuring [[of the]] a hybrid formed between said probe and [[the]] DNA of the biological sample.

26. (Currently Amended) ~~Kit for making use of a~~ A kit for performing the method according to Claim 25 in a biological sample ~~characterized in that it comprises the following parts~~ ,comprising:

a) ~~a probe according to Claim 10;~~ the probe of Claim 25; and

b) [[the]] reagents necessary for [[using]] causing a hybridization reaction.

27. (Currently Amended) ~~Method according to Claims 21, 23 and 25 for the diagnosis of cellular proliferation~~ A method for diagnosing cellular proliferation according to Claim 21.

28. (Currently Amended) ~~Ligand~~ A ligand screening method likely to affect [[the]] transcription activity of a gene, wherein a ~~the~~ promoter of the gene ~~which~~ consists of CCAAT and/or inverted CCAAT boxes (ICB), which ~~likely to~~ bind a polypeptide according to ~~Claims 1 to 4 and 17~~ Claim 2, comprising ~~and which consists of the following steps~~:

a) putting said polypeptide and one or more potential ligand(s) in the presence of reagents necessary for [[using]] causing a transcription reaction; and

b) ~~detection and/or measurement~~ detecting and/or measuring ~~of the~~ transcription activity.

29. (Currently Amended) ~~Ligand~~ A ligand screening method ~~likely~~ to identify ligands that affect the "nuclear receptor" function of [[the]] a polypeptide according to ~~Claims 1 to 4 and 17~~ Claim 2, comprising ~~and which consists of the following steps~~:

a) putting said polypeptide and one or more potential ligands in the presence of ~~the necessary reagents~~ reagents necessary for causing a transcription reaction; and

b) ~~detection and/or measurement of the~~ detecting and/or measuring transcription activity of a gene, wherein said gene comprises a [[the]] promoter [[of]] which comprises CCAAT and/or inverted CCAAT (ICB) boxes likely to bind said polypeptide.

30. (Currently Amended) ~~Kit~~ A kit for making use of a method according to ~~Claims 28 and 29~~ Claim 28 in a biological sample ~~characterized in that it comprises the following parts~~, comprising:

a) ~~a polypeptide according to Claims 1 to 4 and 17~~ the polypeptide of Claim 28;

b) a ligand; and

c) [[the]] reagents necessary for [[using]] causing a transcription reaction.

31. (Currently Amended) ~~Ligand~~ A ligand obtainable by the method according to ~~Claim 28 or 29~~ Claim 28.

32.-33. (Cancelled)

34. (Currently Amended) ~~Use of a compound according to Claims 32 and 33 for the preparation of~~ A method for preparing a drug intended to modulate, increase or decrease cell proliferation, comprising use of a polypeptide according to Claim 2.

35. (Currently Amended) ~~Pharmaceutical~~ A pharmaceutical composition for the preventive and curative treatment of cancer ~~characterized in that it contains~~ comprising a therapeutically effective amount of a ~~compound according to one of Claims 32 and 33~~ polypeptide according to Claim 2 and a pharmaceutically acceptable vehicle.

36. (Currently Amended) ~~Pharmaceutical~~ A pharmaceutical composition ~~characterized in that it comprises~~ comprising an antibody according to ~~one of Claims 18 to 20~~ Claim 18 as a screening agent conjugated with at least one agent selected from the group consisting of antiproliferative, antineoplastic or cytotoxic agents.

37. (Currently Amended) ~~Product~~ A product comprising ~~at least one compound according to Claims 32 and 33~~ a polypeptide according to Claim 2 and at least ~~another~~ one other anticancer agent as a combination product for simultaneous use, separate use or spread over time in anticancer therapy.

38. (Currently Amended) ~~Composition~~ A composition for the detection, localization and imagery of cancers, comprising an antibody according to ~~any one of Claims 18 to 20~~ Claim 18, wherein the antibody is [[labelled]] labeled directly or indirectly with a marker generating a signal selected from the group consisting of radioactive isotopes and nonisotope entities.

39. (Currently Amended) ~~Method for the detection, localization and imagery of~~ A method for detecting, localizing and imaging cancer cells, comprising ~~the steps of~~:

a) parenteral injection of a composition according to Claim 38 in a human being;

b) ~~accumulation after sufficient time of the labelled antibody at the cancer cells, then~~ penetration of ~~the labelled~~ a labeled antibody within said cancer cells, without said antibody being bound substantially to [[the]] normal cells; [[and]]

c) ~~detection of the signal~~ detecting the labeled antibody by means of a signal detector; and

d) ~~conversion of~~ converting the detected signal into an image of cancer cells.

40. (New) A polypeptide according to Claim 2 which comprises at least one domain for fixation to a DNA selected from the group consisting of a "zinc-finger" domain and a "leucine-zipper" domain.

41. (New) A polypeptide according to Claim 40, wherein the DNA sequence on which said polypeptide is bound is a CCAAT box.

42. (New) A method for detecting and/or measuring a polypeptide according to Claim 2 in a biological sample, comprising:

a) contacting the biological sample with an antibody which is specific for the human ICBP90 protein and is capable of inhibiting the interaction between ICBP90 and the DNA sequence on which the protein ICBP90 is specifically bound;

b) and revealing a formed antigen-antibody complex.

43. (New) A method for detecting and/or measuring a polypeptide according to Claim 2 in a biological sample, comprising:

a) contacting the biological sample with an antibody which is specific for the human ICBP90 protein and is capable of inhibiting the interaction between ICBP90 and proteins with which ICBP90 interacts, said proteins preferably being ICBP90 itself or proteins of a transcriptional complex;

b) and revealing a formed antigen-antibody complex.

44. (New) A method according to Claim 23 wherein the measurement is used for diagnosing cellular proliferation.

45. (New) A method according to Claim 25 wherein the measurement is used for diagnosing cellular proliferation.

46. (New) A kit for performing a method according to Claim 29 comprising:

a) the polypeptide of Claim 29;

b) a ligand; and

c) reagents necessary for causing a transcription reaction.

47. (New) A ligand obtainable by the method according to Claim 29.

48. (New) An isolated polypeptide comprising a polypeptide chosen from:

a) a polypeptide with sequence SEQ ID No. 2, SEQ ID No. 4, SEQ ID No. 6 or SEQ ID No. 8;

b) a polypeptide variant of polypeptide with sequences of amino acids defined in a);

c) a polypeptide homologous with the polypeptide defined in a) or b) and including at least 90% homology with said polypeptide of a);

d) a fragment of at least 5 consecutive amino acids of a polypeptide defined in a), b) or c);

e) a biologically active fragment of a polypeptide defined in a), b) or c).

49. (New) A polypeptide according to Claim 3 characterized in that the DNA sequence on which said polypeptide is bound is an inverted CCAAT box.

50. (New) An isolated polynucleotide chosen from:

a) a polynucleotide with sequence SEQ ID No. 1, SEQ ID No. 3, SEQ ID No. 5 or SEQ ID No. 7 or in which the sequence is that of the RNA corresponding to the sequence SEQ No. 1, SEQ ID No. 3, SEQ ID No. 5 or SEQ ID No. 7;

b) a polynucleotide in which the sequence is complementary to the sequence of a polynucleotide defined in a),

c) a polynucleotide with at least 80% homology with a polynucleotide defined in a) or b),

d) a polynucleotide hybridizing under stringent conditions with a polynucleotide sequence defined in a), b) or c),

e) a fragment of at least 21 consecutive nucleotides of a nucleotide defined in a), b), c) or d) with the exception of human EST AI 084 125, with the exception of the sequence corresponding to the sequence SEQ ID No. 944 published August 5, 1999 in the patent application WO 99 38972 and with the exception of the sequences SEQ ID No. 9, No. 10, No. 11 corresponding, respectively, to the human EST No. AI 083 773, AA 811 055, No. AA 488 755, No. AA 129 794 and No. AA 354 253.

51. (New) An isolated polynucleotide chosen from:

a) a polynucleotide with sequence SEQ ID No. 1, SEQ ID No. 3, SEQ ID No. 5 or SEQ ID No. 7 or in which the sequence is that of the RNA corresponding to the sequence SEQ No. 1, SEQ ID No. 3, SEQ ID No. 5 or SEQ ID No. 7;

b) a polynucleotide in which the sequence is complementary to the sequence of a polynucleotide defined in a),

c) a polynucleotide with at least 80% homology with a polynucleotide defined in a) or b),

d) a polynucleotide hybridizing under stringent conditions with a polynucleotide sequence defined in a), b) or c),

e) a fragment of at least 30 consecutive nucleotides of a nucleotide defined in a), b), c) or d) with the exception of human EST AI 084 125, with the exception of the sequence corresponding to the sequence SEQ ID No. 944 published August 5, 1999 in the patent application WO 99 38972 and with the exception of the sequences SEQ ID No. 9, No. 10, No. 11 corresponding, respectively, to the human EST No. AI 083 773, AA 811 055, No. AA 488 755, No. AA 129 794 and No. AA 354 253.

52. (New) A recombinant cloning vector according to Claim 13, further comprising the parts enabling secretion of said polypeptide in a host cell.

53. (New) A method for preparing a recombinant polypeptide according to claim 16, further comprising culturing said host cell under conditions enabling secretion of said recombinant polypeptide.

54. (New) A polypeptide according to Claim 40, wherein the DNA sequence on which said polypeptide is bound is an inverted CCAAT box.